

Most of the heavy rain in the Gulf Coast States was associated with tropical activity. With the passage of hurricane Betsy, 2–4 in. fell in southern Florida and 4–6 in. fell when this storm entered Louisiana and moved up the Ohio Valley. Another storm that originated in the Tropics produced several inches of rainfall on September 29 and 30 as it moved across northwestern Florida and spread rains across several States. On the dates above, the Mobile, Ala., city office reported a 24-hour record fall of 16.85 in., accompanied by heavy flooding.

REFERENCES

1. U.S. Weather Bureau, "Normal Weather Charts for the Northern Hemisphere," *Technical Paper* No. 21, Oct. 1952, 74 pp.
2. L. P. Stark, "Positions of Monthly Mean Troughs and Ridges in the Northern Hemisphere, 1949–1963," *Monthly Weather Review*, vol. 93, No. 11, Nov. 1965, pp. 705–720
3. R. A. Green, "The Weather and Circulation of August 1965—A Cool Month," *Monthly Weather Review*, vol. 93, No. 11, Nov. 1965, pp. 721–726.
4. U.S. Weather Bureau, *Climatological Data, National Summary*, vol. 16, No. 11, Nov. 1965, Chart VIII.
5. U.S. Weather Bureau, *Weekly Weather and Crop Bulletin, National Summary*, vol. 52, Nos. 38, 40, 41, Sept. 20, Oct. 4, Oct. 11, 1965.

New Weather Bureau Publications

Technical Paper No. 55, "Tropical Cyclones of the North Atlantic Ocean," George W. Cry, 1965, 148 pp. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price 70 cents.

Charts showing tracks of North Atlantic tropical cyclones by years, 1871–1963 and broken down into monthly or other calendar periods are preceded by descriptive text on features of formation, intensity, and paths. A short discussion of possible trends in tropical cyclone frequency is also included. This work amplifies but does not supersede *Technical Paper* No. 36, 1959.

Research Paper No. 46, "Application of Synoptic Climatology and Short-Range Numerical Prediction to Five-Day Forecasting," William H. Klein, 1965, 109 pp. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. Price 60 cents.

Multiple regression equations are derived for specifying and predicting 5-day precipitation amounts, surface temperature anomalies, mean 700–1000-mb. thickness, and mean and daily sea level pressure from concurrent and prior anomalies of the 700-mb. height field. The regression equations are applied under operating conditions to prognostic 700-mb. heights produced by baroclinic and barotropic numerical prediction models for periods from 24 to 96 hr. in advance. The verified forecasts are found to compare favorably with predictions produced by several controls and by other forecast methods.